AMENDMENTS IN THE SPECIFICATION

Please replace paragraph beginning on page 7, line 2, with the following:

With reference now to the figures and in particular with reference to Figure 1, there is illustrated a general diagram of the topology of a GPRS network 10 utilized to implement a preferred embodiment of the invention. The GPRS network 10 comprises a mobile switching center (MSC)/visitor location register (VLR) 12, a home location register (HLR) and authentication center (AuC) 14, a gateway GPRS support node (GGSN) 20, a serving GPRS support node (SGSN) 24, and a base station system (BSS)/packet control unit (PCU) 28. GGSN 20 is coupled to SGSN 24 via GPRS IP backbone 22. BSS has an associated BSS antenna 30, which provides a wireless airlink with mobile terminal 27 via mobile terminal antenna 29. The MSC/VLR 12 provides voice communications for wireless (cellular) terminals. The MSC/VLR 12 is in direct communications with the HLR/AuC 14, the SGSN 24, and the BSS/PCU 28. The HLR/AuC 14 is in direct communications with SGSN 24 and GGSN 20.

Please replace paragraph beginning on page 8, line 1, with the following:

Figures 2A-2C[[,]] illustrates a 120 msec multi-frame 201, which consists of 26 slots 203 (i.e., time division multiple access (TDMA) frames). Of the 26 slots 203 in the 120 msec multi-frame 201, 25 are used for voice, while 1 is used for signaling. Each slot 203 consists of 8 Burst Periods (BPs) 205 each of 577 mksec duration. One BP 205 within the slot corresponds to one transmission channel (TCH). Because each TCH supports a single conversation in operation, one TCH slot 203 can simultaneous carry 8 conversations.

Please replace paragraph beginning on page 9, line 4, with the following:

The preferred embodiment of the present invention thus provides a Packet Data Traffic Channel (PDTCH) that utilizes TCM coders to perform channel-coding 303~~313~~. The invention ~~thus~~ provides a hardware and/or logic system at a data station by which channel coding at the origination station is completed by a TCM encoder and channel decoding at the receiving data station is completed by a TCM decoder. Although described herein as separate components, the invention contemplates utilizing a single encoder/decoder device to perform functionality of channel-coding 303.

Please replace paragraph beginning on page 10, line 1, with the following:

Voice transmissions by mobile phones are not adversely affected by the present coding systems because the bit errors in voice transmission can be tolerated. However, the present invention contemplates also extending the features associated with TCH coding to voice transmission over hand-held mobile units (e.g., mobile phones) to allow for additional capacity for wireless voice communications. Utilization of TCM for voice may significantly increase the number of simultaneous voice conversation within the available bandwidth. Continuing developments in Integrated Circuits (IC) technology allows for the miniaturization of the Trellis encoder and decoder components to allow implementation of IC-level Trellis encoders and decoders to be incorporated within a mobile phone without necessarily increasing the size of the phone or other small, wireless components.